COMMUNITY PROTEST GROUPS' PERCEPTIONS OF ENVIRONMENTAL RISKS USING SOCIAL CONTAGION THEORY

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Local communities are vulnerable to the potential environmental risks associated with construction activity. Currently, little is understood about how perceptions of environmental risks are shaped and spread within a community. A better understanding of this process can help bridge the gap between developers and communities and bring about more sustainable development practices. This paper reports a research methodology which uses social contagion theory to investigate this process. The research adopts a single case study approach of a highly controversial housing project in the greater Sydney metropolitan area. The case study is particularly significant as it investigates an extensive and on-going community-based protest campaign (dating back almost 20 years) that has generated the longest standing 24 hour community picket in the New South Wales.

Keywords: collective action, construction projects, environmental risk perceptions, social contagion.

BACKGROUND

The potential impacts of a construction project can affect the ecological, social, cultural, economical and political environment in which they are procured. These impacts often extend beyond direct financial or physical assets, to affect the way a community operates and even perceives risk. In this sense, risk has increasingly been referred to as a socio-cultural construct reflecting the fact that different groups, societies and cultures choose those things they consider "risky" (Adams, 1995; Lupton, 1999). It is therefore integral that the potential impacts of these projects, both positive and negative, are perceived to be managed effectively, especially by local communities who are often most vulnerable to and potentially experience first hand, the most direct benefits and costs associated with a project (Stoffle *et al.*, 1991; Gusterson, 2000). Currently, little is understood within the construction industry about how environmental risk perceptions are shaped and spread within a community. This is an important deficiency especially with growing public interest in environmental issues. Indeed, an increasingly watchful and critical eye has been cast on the construction industry's handling of and mitigation of these environmental impacts, due in part to the industry's past insensitivity to them (Owens and Owens, 1991; Post, 1991). Indeed, there are increasing documented incidences of communities coming together to oppose a new development taking place in their area, and evidence that

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Teo, M and Loosemore, M (2006) Community protest groups' perceptions of environmental risks using social contagion theory. *In:* Boyd, D (Ed) *Procs 22nd Annual ARCOM Conference,* 4-6 September 2006, Birmingham, UK, Association of Researchers in Construction Management, 319-326.

this is a growing cause of concern for the industry (Gusterson, 2000; Scherer and Cho, 2003; Murandian *et al.*, 2003).

Given the tendency of communities to work through temporary coalitions of interest groups to oppose developments, it is particularly important to understand how these community-based protest groups – which are usually made up of members of the local community - operate and interact (Gusterson, 2000; Wakefield *et al.*, 2001). This is especially important since conflicts of this nature are often long-standing occurrences and can have potentially serious implications for the construction industry e.g. project delays, bad publicity and share price implications (Lam, 1999). While there has been some research into the environmental risk perceptions of project stakeholders on construction projects, very little research has focused on community protest groups as a unit of analysis. Further, while a diverse number of groups and individuals may be involved in any opposition process, Klandermans (1992) and Bearman and Everett (1993) suggest that protest events are often driven and led by a core group of activists who are responsible for mobilising support amongst other members of the community as the occasion or event arises, especially in the case of long-term activism. In this context, the aim of this paper is to describe the rationale and method underlying a research project which is investigating the social forces that influence community protest groups' perceptions of environmental risks. More specifically, it is investigating patterns of interaction by which environmental risk perceptions spread through communities and the contributing role of community-based social capital that sustains collective action over time. The objective of this research is to help the construction industry better engage with local communities so as to produce more sustainable and socially, culturally and ecologically sensitive outcomes.

SOCIAL CONTAGION THEORY

One useful approach for understanding how environmental risks perceptions spread through communities is social contagion theory. Social contagion theory explains how individuals adopt the attitudes, perceptions or behaviour of others within the social networks with whom they communicate (Scherer and Cho, 2003). In the context of construction projects, this highlights the importance of interpersonal networks in shaping people's risk perceptions. The theory does not require that there is intent to influence, or even an awareness of influence, only that communication takes place (Levy and Nail, 1993; Monge and Contractor, 2001). In the context of community-driven collective action against construction projects, this suggests that community members are more likely to join a protest movement and stay involved in the long-run if they are connected to like-minded people within their personal networks (della Porta and Diani, 1999).

Social contagion theory offers two competing explanations of the effect of communication on contagion processes: cohesion and structural equivalence. Cohesion explores relationships based on communication, and advocates that frequency of communication between members increases the likelihood that shared perceptions are present. Structural equivalence explores how members with similar communication patterns influence each other (Hartman and Johnson, 1990; Monge and Contractor, 2001). However, social contagion theory alone may not provide sufficient explanations as to why community-based protest groups evolve and are able to sustain their activities over long periods of time. A complimentary theory which can help deepen explanations of this process is that of social capital – which can be explained as "features of social organisation such as networks, norms and social trust

that facilitate co-ordination and co-operation for mutual benefit" (Putnam, 1995: 67). In this sense, involvement in various aspects of the local community, such as community groups and social clubs, is thought to produce self-reinforcing networks and shared norms of behaviour between community members which may encourage collective action for mutual or community benefit (Hartman and Johnson, 1990; Wakefield *et al.*, 2001).

When applied to the process by which environmental risk perceptions spread through community protest groups, these theories suggest that:

- Some people are more immune to being infected than others
- Some people are more reactive to information than other
- Some people are more infectious than others (more likely to pass it on)

The next section of this paper details the research design and data collection techniques adopted.

METHOD

Before progressing to a detailed discussion of the research design adopted to investigate the research propositions highlighted above, it is important to set out the epistemological position of this research project. In an epistemological sense, two conflicting views of reality prevail, namely the positivist and naturalist. The positivist is concerned with the testing of theories while the latter with their generation. Central to positivism is the conception of scientific methods, which through comparison of theory and facts, permit the investigation of specific variables, such that theories can be confirmed or at least falsified, with certainty (Hammersley and Atkinson, 1995). From a sociological and behavioural viewpoint, this has been criticized by naturalist who argue that because people's behaviour are not caused on a mechanical way, it is not amendable to the sort of causal analysis and manipulation of variables that are characteristic of the quantitative research inspired by positivism (Sarantakos, 1993). By contrast, naturalist approach is mainly concerned with the formulation of theory through the use of qualitative research tools that permits the studying of the social world in its 'natural' state with the aim of developing an understanding and accurate account of reality in its most natural environment (Hammersley and Atkinson, 1995).

The naturalist approach is most appropriate to this research as perceptions of environmental risks are socially constructed and are maintained over time by people or groups in the social world, and is a social phenomenon that cannot be explored or tested using scientific laws or models. Indeed, given the emotive and sensitive nature of issues being explored, this is the best way to gain the trust of the local community and to assure the reliability and validity of data.

Within this broad epistemological content, a grounded theory approach has been adopted to collect and analyze data. Grounded theory is a methodological framework that sets out to find out what theory accounts for the research situation as it is and advocates a 'learn-as-you-go' approach with the ultimate aim being to ground the theory in data from natural and real situations (Glaser, 1998). Grounded theory is of particular value where a concept is not well developed in a specific discipline or where the relationships between concepts are poorly understood or poorly defined (Strauss and Corbin, 1990: 37). While the literature review in the current study has contributed to the development of a conceptual model that incorporates social contagion theory with social capital theory, more detailed data is required in order to

fully ground the theoretical framework, which makes this research exploratory in nature. The grounded theory approach therefore advocates the need to: go out into the field to understand what is going on; ensure theory reflects reality; realize the active role of people in shaping the world they live in; and realize that change and complexity are fundamental to life (Strauss and Corbin, 1990: 25).

Case study research compliments the grounded theory approach and within this context, data collection will occur within the planning stages of a project, since it is generally at this stage of the project that opposition begins and intensifies.

The Case Study Project

This research has adopted a single case study of a community-based opposition that centres on a large-scale housing project taking place in an area known as Kuradji Sandon Point, located in Wollongong, approximately 70km south of Sydney on the coast of New South Wales. Kuradji Sandon Point is an area of immense natural beauty that incorporates many layers of archaeological, Aboriginal, historical, cultural, aesthetic, and environmental heritage and significance and is located along one of the last green corridors in the Illawarra that joins the escarpment to the coast. The controversy on the 61 hectare site focuses on a proposed 20 stage, 1200 unit housing project to be developed by Stockland Trust Group - a publicly listed firm and one of the Australia's largest property developers – and has stirred community interest into both opposition and support. In particular, this research investigates an extensive and on-going community-based protest campaign which has been directed towards the proposed project. This protest has included the setting up of a 24-hour community picket and information centre (currently the longest standing picket in NSW) since March 2001. The community picket also helped establish and continues to support the Sandon Point Aboriginal Tent Embassy (SPATE) located nearby, and is one of the few places in Australia where indigenous and non-indigenous people stand united in their fight for a common cause The support for the community-based action groups within the community is widespread, with community perception cemented by a common belief that an area of immense indigenous cultural value and ecological importance would be destroyed by the proposed project.

During the height of the controversy, between the years 2001 to 2003, numerous public meetings and rallies were held, and hundreds of petitions (most generating between hundreds to thousands of signatures each) and letters of appeal were sent by thousands of members of the local community to rally support to abandon the proposed project in favour of a coastal park and for the creation of an environmental/ cultural centre on the land. Strong community pressure also led to a Commission of Inquiry (CoI) to be ordered on Sandon Point into the behaviour of Stockland, Wollongong City Council (WCC), National Parks and Wildlife Services (NPWS) and the Department of Infrastructure, Planning and Natural Resources (DIPNR). In October 2003, the CoI found in favour of the community and recommendations were made to bring certain portions of the land (in dispute) into public ownership, and for the proposed project to be scaled down significantly. This delivered a victory for the local community, who since that time, have been patiently awaiting the implementation of the CoI findings by the NSW planning minister, Craig Knowles.

To date, the community protest has:

- Successfully delayed the project for the past 4.5 yrs – construction work has been permanently halted until a decision has been made on the outcome of the CoI recommendations.

- Generated public distrust and scepticism against Stockland, who have been engaged in numerous lengthy and costly court battles, targeting the community as a whole as well as individual, in a scare tactic to curtail further community opposition to the proposed project.
- Implicated the local and state authorities e.g. Wollongong City Council, Sydney water in the issue amidst community outcries that the authorities have adopted a nonchalant attitude to community concerns about the proposed project.
- Contributed to the loss of the Labour stronghold in the federal seat of Cunningham to the Australian Greens in the year 2002 elections.

An understanding of the diverse number of groups and individuals involved in the community opposition process would therefore allow insights into how and why these longstanding conflicts evolve. In this sense, the community opposition at Sandon Point represents one of the longest standing, high-profile and organized community-driven opposition of a project in Australia. It also presented a unique research opportunity to document and explore the social capital and networks which have contributed to this process and their role in sustaining the opposition process over time and represents a unique example of the contagion process at work. While there maybe concerns about the limited representation of findings in the case study of a single project, Berg (2001) argues that such concerns are unnecessary as there is clear scientific value from trying to understand a single individual, group or event as it provides a general understanding about similar individuals, groups and events, especially if the research is undertaken in sufficient depth to justify the approach. Within this case study, data collection and analysis will occur in two phases.

Phase One – Semi-Structured Interviews

Semi-structured interviews were employed in phase 1 to identify key groups and individuals involved, provide insights into their perceptions, involvement and contribution to protest events and to identify the core groups/ members involved in protesting the case study project. Building on the grounded theory approach, the basis for sample selection is based on 'theoretical sampling', which aims to select a sample based on the compatibility of the informants to the issues of theoretical importance to the study (Strauss and Corbin, 1990; Boyatzis, 1998). The interviewees were therefore a self-selecting sample made up of members of local community protest groups. The number of interviews conducted was guided by the concept of 'theoretical saturation' – which advocates that sampling continues until no new data is obtained from new cases added to the sample (Boyatzis, 1998).

Data from the interviews will be complemented by a review of archival information such as newspaper reports, photos, letters and other email correspondences and formal official reports; as well as observational data obtained from the researcher's presence as a participant observer at public and protest group meetings. This ethnographic approach was necessary to build trust and facilitates access to data which may not otherwise be made available to the researcher (Hammersley and Atkinson, 1995).

Data derived from the interviews, archival sources and observational data will be manually transcribed and analysed using the Leximancer Text Mapping software. Leximancer is a text mining and visualization tool system used to perform network, content and thematic analysis of text documents and displays the extracted information on a conceptual map which provides a birds eye view of key conceptual

themes and their interrelationships, and is useful for charting and exploring large bodies of texts such as those used in this research (Liu, 2004; Leximancer, 2005). The narrative technique will then be used to integrate and provide a richness of explanations for understanding the different key concepts highlighted and to construct a shared account of the community opposition process and the role and involvement of the community protest groups (Rappaport, 2000).

Data analysed in phase one will lead to the refinement of existing research propositions to build into draft conditional statements and questions to be explored in phase two of data collection.

Phase Two – Focus Groups

Phase two will consist of focus group sessions of members of the identified core group involved in the case study project. Focus groups are utilised as the research tool of choice for phase two as they facilitate discussions about the findings and insights gained from phase one. According to Stewart and Shamdasani (1990) and Morgan (1997), one of the strengths of focus group research is that it provides direct evidence about similarities and differences in participants' opinions and experiences while according the researcher flexibility in setting the focus and structure of discussion. This allows the researcher to explore unexpected leads and to make observations of behaviour and to delve deeper into people's perceptions, beliefs and feelings about a topic of research.

CONCLUSION

This paper reports a research design and methodology intended to investigate community protest groups' perceptions of environmental risks using social contagion theory and social capital as a conceptual framework. The research methodology utilises two interrelated phases of data collection, the first phase being semi-structured interviews and the second utilising focus groups. The aim of the research is not to find a means by which the construction industry can make unpalatable projects seem more appealing, but to find ways by which the industry can genuinely work with local people and local communities to find socially, culturally and ecologically sensitive solutions to development needs.

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